



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,496	01/21/2004	Tomoyuki Ohzeki	FS-F03224-01	1131
37398	7590	04/19/2005	EXAMINER	
TAIYO CORPORATION 2111 JEFFERSON DAVIS HIGHWAY #412, NORTH ARLINGTON, VA 22202			CHEA, THORL	
			ART UNIT	PAPER NUMBER
			1752	

DATE MAILED: 04/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/760,496

Applicant(s)

OHZEKI ET AL.

Examiner

Thorl Chea

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 01212004; 4292004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This first office action is responsive to the communication on January 1, 2004 and July 7, 2004. Claims 1-21 are pending in this instant application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Watanabe et al (US 2004/0126723). See pages 46-47, claims 1-19; page 20, [0189]; page 21, formula (A-2) page 27, formula (H); the polymer latex on page 24 to page 26. The teaching of Watanabe et al wholly encompasses the invention as claimed.

Art Unit: 1752

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

5. Claims 1-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Oka et al (US 2003/0232288A1). See the document as a whole, especially pages 193-195, claims 19-55; page 27, [0279]; page 37, [0391]; page 49, [0062]. Oka et al considered as a whole disclose the invention claimed in the present invention. Therefore, the invention as claimed lacks novelty.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

6. Claims 1-21 rejected under 35 U.S.C. 102(e) as being anticipated by Ohzeki et al (US Patent No. 2004/0033454).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

Art Unit: 1752

inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

See page 6, [0015]; page 13, compound (11) to (34) page 18, compounds 80, 81; page 3, [0055]; page 27, [0265]; pages 28-33. The invention as claimed wholly encompasses the scope disclosed in Ohzeki et al (US Patent No. 2004/0033454). Therefore, the claimed invention lacks novelty.

7. Claims 1-2 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yang et al (US Patent No. 6,610,450).

See columns 51-52, claims 1-22 wherein the material contains silver halide emulsion, non-light sensitive silver salt oxidizing agent, a reducing agent and the compound containing a blocked color forming agent containing a developer and an heterocyclic group and a phenolic activating agent associated therewith. See blocked color forming agent in columns 11-18 compounds D-1 to D-30 which contains a developer and the heterocyclic group that read on the reducing agent and adsorption group presented in the present invention, and the phenolic activating agent within the meaning of the claimed development accelerator. The blocked developer of Yang et al inherently possesses the function of the compound claimed in the present claimed invention. In the absence of showing otherwise, it is asserted that the invention as claimed is either anticipated by or found obvious over Yang et al.

8. Claims 1-2 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Katoh (US Patent No. 6,379,880).

See especially compound in columns 6-13, compounds D-1 to D-50 which contains mercapto group and the phenolic group or amino group that inherently have functional property claimed in

Art Unit: 1752

the present claimed invention such as "adsorption group to silver halide and a reducing group", and the nucleating agent in column 25, compound 11-13 having property as development accelerator. Accordingly, the invention as claimed is either anticipated by or would have been found prima facie obvious to the worker of ordinary skill in the art due to the inherent functional of group of the compound taught in Katoh.

9. Claims 4-9, 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katoh (US Patent No. 6,379,880) as applied to claims 1-2 above, and further in view of Uytterhoeven et al (US Patent No. 6,143,488), Siga et al (US Patent No. 4,332,889), Toya et al (US Patent No. 5,998,126), and Matsumoto et al (US Patent No. 5,958,668).

The teaching of Katoh is as shown in the paragraph 7 above. The additives such as silver halide containing more than 5 mole % or more of silver iodide, the reducing agent such as bisphenol compound, the material can be exposed with laser beam containing silver iodide of 0.1 to 40 mole % and the polyhalogen containing compound known as antifoggant has been known in the art such as taught in Uytterhoeven et al (US Patent No. 6,143,488), Siga et al (US Patent No. 4,332,889), Toya et al (US Patent No. 5,998,126), and Matsumoto et al (US Patent No. 5,958,668). See Uytterhoeven et al in the abstract which disclose a photothermographic material containing silver halide having silver iodide content at least 80 mole % and exhibits the storage stability; Siga et al in column 6, lines 43-68 which discloses silver bromiodide containing molar ratio of silver iodide to silver bromide from 30/70 to 98/2 to provide a photothermographic material exhibiting improved spectral sensitivity as well as excellent storage stability; Toya et al in column 16, lines 50-64 which disclose a photothermographic material containing silver halide having iodide from 0.1 to 40 mole % to be exposed with laser beam; and Matsumoto et al

Art Unit: 1752

in column 2, lines 15-35 and in column 18 which shows the polyhalogenate compound as antifoggant for photothermographic material and the phenol compound as reducing agent for silver ion. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the commonly additive known in the prior art in the material of Katoh for same reason disclosed therein, and thereby provide a material as claimed.

10. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (US Patent No. 6,083,680) in view of Toya et al (US Patent No. 5,998,126), Mifune et al (US Patent No. 5,780,218) and Katoh (US Patent No. 6,379,880).

Ito et al discloses a photothermographic material substantially as claimed. See columns 98-99, claim 1 and abstract wherein a photothermographic material contains silver halide, a light-insensitive organic silver salt and binder wherein the main binder of an image forming layer containing light-sensitive silver halide is polymer latex having glass-temperature of 40 °C or less; the organic silver salt of an organic acid including silver behenate in column 10, lines 32-33; and the reducing agent in column 12, lines 31-67 and the silver halide in column 4. Matsumoto et al in column 17, lines 10-39 discloses that silver behenate is most preferred in term whiteness and light stability, moisture resistant and can be used in combination with weak reducing agent and excellent toning. The silver halide include silver iodide. Mifune et al discloses a compound having group which capable of bring adsorbed onto silver halide and reducing group to provide a photographic material with high speed. See column 2, compound I, and Katoh discloses a photothermographic material with less temperature dependence in heat development, stable performance against fluctuation in heat development conditions, and light

Art Unit: 1752

gradation hardness. The material contains a compound within the meaning defined in the present invention. See exemplified compounds in columns 6-13.

Ito et al may not disclose specifically the content of light-insensitive organic silver salt and the compound having an adsorption group to silver halide and a reducing group of the claimed invention. However, Ito et al suggest the use of silver behenate among the other known light-insensitive organic silver salt, and the compound having an adsorption group to silver halide and a reducing group has been known in Mifune et al and Kato to enhance the speed of a photothermographic material or to produce a heat-developable material with less temperature dependence in heat development. The silver behenate is the most preferred light-insensitive organic silver salt is taught in Toya et al. It would be obvious to the worker of ordinary skill in the art at the time the invention was made to use silver behenate in combination with the compound taught in Mifune et al and Kato for same reasons disclosed above, and thereby provide a material as claimed.

11. Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al (US Patent No. 6,083,680) in view of Toya et al (US Patent No. 5,998,126), Mifune et al (US Patent No. 5,780,218) and Katoh (US Patent No. 6,379,880) as applied to claims 10-14 above, and further in view of Siga et al (US Patent No. 4,332,889). Siga et al in column 6, lines 43-68 which discloses silver bromiodide containing molar ratio of silver iodide to silver bromide from 30/70 to 98/2 to provide a photothermographic material exhibiting improved spectral sensitivity as well as excellent storage stability. It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use silver bromiodide taught in Siga et al in the material obtained by the combination of the applied prior art above with a reasonable of

Art Unit: 1752

achieving material exhibiting improved spectral sensitivity as well as excellent storage stability, and thereby provide a material as claimed.

Double Patenting

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 1-2, 5-6, 15-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 21-30 of copending Application No. 10/633,253 in view of McCarney (US Patent No. 4,395,484). The claimed invention and those claimed in the copending application differs from the use of the development accelerator and the antifoggant such as polyhalogenate compound, which is however have commonly used in the art such as disclosed in McCarney in column 6, lines 32-68 and Matsumoto et al (US Patent No. 5,958,668). It would have been obvious to the worker of ordinary skill in the art at the time the invention was made to use the development accelerator and antifoggant known in the to improve the speed of developing process and to improve its fogging property, and thereby provide an invention as claimed.

This is a provisional obviousness-type double patenting rejection.

Art Unit: 1752

Conclusion

14. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thorl Chea whose telephone number is (571) 272-1328. The examiner can normally be reached on 9 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tchea *telh*
April 4, 2005

Thorl Chea
Thorl Chea
Primary Examiner
Art Unit 1752